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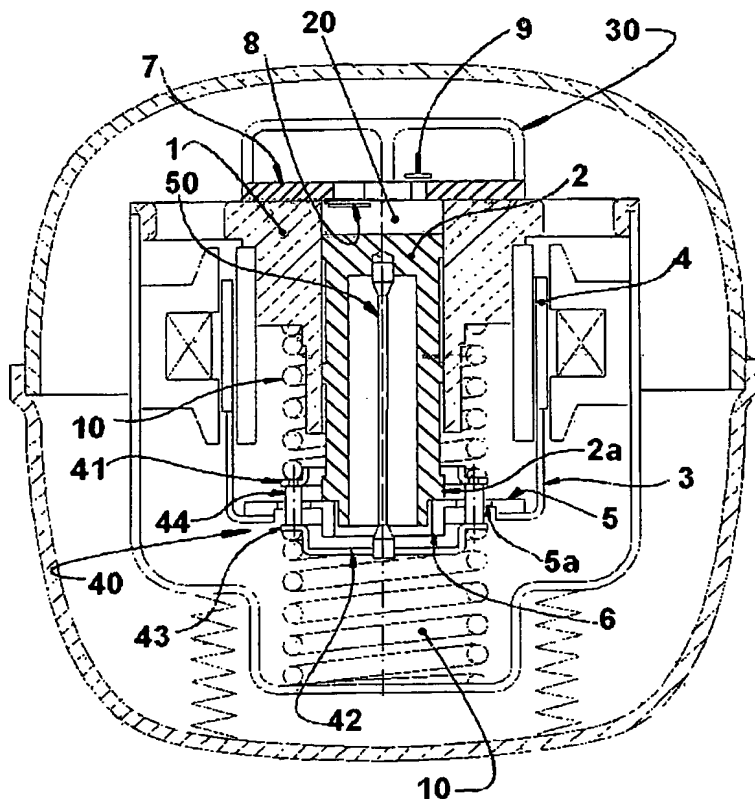
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[Continued on next page]

(54) Title: RECIPROCATING COMPRESSOR DRIVEN BY A LINEAR MOTOR



(57) Abstract: A reciprocating compressor driven by a linear motor, comprising a shell, within which are mounted: a reference assembly formed by a motor and a cylinder (1); a resonant assembly formed by a piston (2) reciprocating inside the cylinder (1), and by an actuating means (3) operatively coupling the piston (2) to the motor; two spring means (10) mounted to the resonant assembly and to the reference assembly and which are elastically and axially deformed in the displacement direction of the piston (2); a mounting element (40) coupling an end of one spring means (10) to an end of the other spring means (10); and a coupling element (50) mounted to the piston (2) and to the mounting element (40), which is axially displaced together with the piston (2) and displaced freely and transversally to the displacement direction of the piston (2), said coupling element (50) transmitting the axial forces between the piston (2) and the mounting element (40) and minimizing the application of radial forces to the piston (2).

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EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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## INTERNATIONAL SEARCH REPORT

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